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10/614,060	07/08/2003	Anish Pulikottil Joseph	200207333-1	7541

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EXAMINER

PHAM, KHANH B

ART UNIT	PAPER NUMBER
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2166

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/614,060	Applicant(s) JOSEPH, ANISH PULIKOTTIL	
	Examiner Khanh B. Pham	Art Unit 2166	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5-8,11-15,18-21,23-27 and 30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-8,11-15,18-21,23-27 and 30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 9, 2006 has been entered.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. **Claims 7-8, 11-15, 18-21, 24-27, and 30** are rejected under 35 U.S.C. 103(a) as being unpatentable over Vijayan (US 6,832,341 B1), hereinafter "**Vijayah**", and in view of Marwaha (US 2004/0181685 A1), hereinafter "**Marwaha**".

As per claim 7, Vijayan teaches a method of managing different types of events in a distributed computing system, having an event engine including the steps of:

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- i. "providing one or more intelligent agents configured for receiving at least one event specifying a type of server failure, and inputting an event into the engine" at Col. 4 lines 45-50, Col. 5 lines 3-13 and Fig. 4;
- ii. "the engine extracting a rule to be applied to the event from a rules database wherein identification information within the rule identifies the event" Col. 4 line 66 to Col. 5 line 43;
- iii. "the engine creating and outputting a new event indicating a server failure has occurred" at Col. 5 lines 30-44;
- iv. "inputting the new event into the engine" at Col. 5 lines 45-55;
- v. "the engine extracting a second rule to be applied to the new event from the rules database wherein identification information within the second rule identifies the new event" at Col. 4 line 66 to Col. 5 line 43;
- vi. "the engine holding the new event for the expiration of a specified interval" at Col. 7 lines 35-44;
- vii. "before the expiration of the specified interval, receiving at least one subsequent event from an intelligent agent, and inputting the subsequent event into the engine" at Col. 7 lines 35-44;
- viii. "the engine identifying the subsequent event using identification information within the second rule" at Col. 4 line 66 to Col. 5 line 43 ; and
- ix. "wherein, if the subsequent event indicates a server restoration has occurred, outputting the subsequent event to a user, or if the subsequent event indicates a type of server failure, the subsequent event is discard, and after the expiration of the specified

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interval the new event indicating a server failure has occurred is output to the user" at col. 5 lines 1-55.

Vijayan does not explicitly teach the step of "converting the event into a standard format". However, Marwaha teaches a similar system for managing events in a distribute system (See Fig. 3.) Marwaha recognizes the problem of having multiple event formats as "it becomes more and more difficult for the operators to manage, process and handle alerts" at [0041] and suggests the step of converting events into a standard format at page 6, [0061]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Marwaha with Vijayan's teachings to make it easier to manage, process and handle different format events as suggested by Marwaha.

As per claim 8, Vijayan and Marwaha teach the method as claimed in claim 7 discussed above. Vijayan also teaches: "wherein the event and the subsequent event originate from any of a set of a network, an application, an operating system, and hardware" at Col. 4 lines 43-49.

As per claim 11, Vijayan and Marwaha teach the method as claimed in claim 8 discussed above. Vijayan also teaches: "wherein the identification information includes: i. an attribute; ii. an operator; and iii. a value" at Figs. 7-8.

As per claim 12, Vijayan and Marwaha teach the method as claimed in claim 11 discussed above. Vijayan also teaches: "wherein the specified interval is time" at Col. 5 lines 15-30.

As per claim 13, Vijayan and Marwaha teach the method as claimed in claim 12 discussed above. Vijayan also teaches: "wherein the subsequent event is received by a user console" at Col. 7 lines 50-55.

As per claim 14, Vijayan teaches a method of managing different types of events in a distributed computing system using a management server, having an event engine including the steps of:

- i. "providing one or more intelligent agents for receiving at least one event related to the performance of a network, and inputting the event into the engine" at Col. 4 lines 45-50 and Fig. 4;
- ii. "the engine extracting a first rule to be applied to the event from a rules database wherein identification information within the first rule identifies the event" at Col. 6 line 50 to Col. 7 line 19;
- iii. "the engine creating and outputting a new event having an attribute set to the type of event related to the performance of the network received" at Col. 5 lines 1-55;
- iv. "inputting the new event into the engine" at Col. 5 lines 45-55;
- v. "receiving at least one subsequent event indicating a portal service failure event from an intelligent agent" Col. 5 lines 1-43;

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- vi. “the engine extracting a second rule to be applied to the subsequent event from a rules database, wherein identification information within the second rule identifies the subsequence event” at Col. 5 lines 15-30;
- vii. “the engine holding the subsequent event for an expiration of a specified interval” at Col. 5 lines 20-30;
- viii. “before the expiration of the specified interval, receiving the new event” at Col. 5 line 1-43; and
- ix. “the engine creating and outputting an event identifying the cause of the portal service failure, having an attribute set to the attribute of the new event that is set to the type of event related to the performance of the network” at Col. 5 lines 30-45 and Col. 7 lines 44-55.

Vijayan does not explicitly teach the step of “converting the event into a standard format”. However, Marwaha teaches a similar system for managing events in a distribute system (See Fig. 3.) Marwaha recognizes the problem of having multiple event formats as “it becomes more and more difficult for the operators to manage, process and handle alerts” at [0041] and suggests the step of converting events into a standard format at page 6, [0061]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Marwaha with Vijayan’s teachings to make it easier to manage, process and handle different format events as suggested by Marwaha.

As per claim 15, Vijayan and Marwaha teach the method as claimed in claim 14 discussed above. Vijayan also teaches: "wherein the event and the new event originate from any of the set of a network, an application, an operating system, and hardware" at Col. 4 lines 43-49.

As per claim 18, Vijayan and Marwaha teach the method as claimed in claim 15 discussed above. Vijayan also teaches: "wherein the identification information includes: i. an attribute; ii. an operator; and iii. a value" at Figs. 7-8.

As per claim 19, Vijayan and Marwaha teach the method as claimed in claim 18 discussed above. Vijayan also teaches: "wherein the specified interval is time" at Col. 7 lines 20-26.

As per claim 20, Vijayan and Marwaha teach the method as claimed in claim 19 discussed above. Vijayan also teaches: "wherein the new event is received by a user console" at Col. 7 lines 50-55.

As per claim 21, Vijayan teaches a method of managing different type of events in a distributed computing system including the steps of:

- i. "receiving a first event indicating a database failure " at Col. 4 lines 43-49;
- ii. "extracting a rule to be applied to the first event from a rules database wherein identification information within the rule identifies the first event" at Col. 4 line 66 to Col. 5 line 29;
- iii. "the engine holding the first event for an expiration of a specified interval" at Col. 5 lines 15-30;

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- iv. "if a subsequent event indicating the database is restored is received before expiration of the specified interval, discarding the first event and the subsequent event" at Col. 5 lines 15-45;
- v. "if the subsequence event indicating the database is restored is not received before expiration of the specified interval, outputting the first event indicating database failure to a user" at Col. 5 lines 15-45.

Vijayan does not explicitly teach the step of "converting the first event into a standard format". However, Marwaha teaches a similar system for managing events in a distribute system (See Fig. 3.) Marwaha recognizes the problem of having multiple event formats as "it becomes more and more difficult for the operators to manage, process and handle alerts" at [0041] and suggests the step of converting events into a standard format at page 6, [0061]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Marwaha with Vijayan's teachings to make it easier to manage, process and handle different format events as suggested by Marwaha.

As per claim 24, Vijayan teaches a system for managing different type of events in a distributed computing system including:

- i. "computer code for providing a plurality of event agents adapted to receive data from a source, to create an event from the data and to transmit the event to a central event system" at Fig. 4, 402, 404, 406, 420; and

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ii. "computer code for providing a central event system (Fig. 4, 430) including:

a) a rules database (Fig. 4, 422) adapted to store a plurality of rules, each rule including:

I. identification information specifying to which events the rule relates; and

II. an action for filtering, correlating or consolidating one or more received events

wherein the action is one of outputting the event, discarding the

event, holding the event, or creating a new event; wherein, where the action is

holding the event the rule further includes: I. a condition; and II. a further action

wherein the further action is one of outputting the event, discarding the event,

holding the event, creating a new event, or creating a new event and transmitting

the new event back into the processing engine" at Cols. 5-7; and

b) a processing engine adapted to receive events, to extract rules from the rules

database, to identify which rules apply to the events using the identification information

within the rule, to perform the action specified within the applicable rules, and to perform

the further action specified within the applicable rules when the corresponding condition is satisfied" at Cols. 4-7.

Vijayan does not explicitly teach the step of "converting the event into a standard format". However, Marwaha teaches a similar system for managing events in a distribute system (See Fig. 3.) Marwaha recognizes the problem of having multiple event formats as "it becomes more and more difficult for the operators to manage, process and handle alerts" at [0041] and suggests the step of converting events into a standard format at page 6, [0061]. Thus, it would have been obvious to one of ordinary

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skill in the art at the time of the invention was made to combine Marwaha with Vijayan's teachings to make it easier to manage, process and handle different format events as suggested by Marwaha.

As per claim 25, Vijayan and Marwaha teach a system as claimed in claim 24 discussed above. Vijayan also teaches: "one or more user consoles adapted to receive one or more of the events outputted by the central event system" at Fig. 4, 418.

As per claim 26, Vijayan and Marwaha teach the system as claimed in claim 25 discussed above. Vijayan also teaches: "wherein the source is any one of a set of a database, an application, an operating system, and hardware" at Col. 4 lines 43-49.

As per claim 27, Vijayan and Marwaha teaches a system as claimed in claim 26 discussed above. Vijayan also teaches: "wherein the identification information includes: i. an attribute; ii. an operator; and iii. a value" at Figs. 7-8.

Claim 30, recite computer system, storage media for executing the method and system of claims 21, 24 and therefore rejected by the same reasons discussed above.

4. **Claims 1-2, 5-6 and 23** are rejected under 35 U.S.C. 103(a) as being unpatentable over Vijayan and Marwaha as applied to claims above, and further in view of Konsmo et al. (US 5,844,808 A), hereinafter "Konsmo".

As per claims 1, 23, Vijayan teaches a method of managing events in a distributed computing system having an event engine including the steps of:

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- i. "providing one or more intelligent agents for receiving a first event, and inputting the first event into the engine" at Col. 4 lines 45-50 and Fig. 4, element 402, 404, 406;
- ii. "the engine extracting a rule to be applied to the first event from a rules database wherein identification information within the rule identifies the first event" at Col. 4 line 66 to Col. 5 line 43;
- iii. "the engine holding the first event for the expiration of a specified interval" at Col. 7 lines 20-25 and Fig. 5, 510;
- iv. "before the expiration of the specified interval, receiving at least one subsequent event from an intelligent agent, and inputting the subsequent event into the engine" at Col. 5 lines 3-13;
- v. "the engine identifying the subsequent event using identification information within the rule" at Col. 6 line 62 to Col. 7 line 20 ;
- vi. "waiting for identical subsequent events; at Col. 5 lines 3-13;

Vijayan does not explicitly teach the following steps vii to xii because Vijayan does not keep track the number of identical events nor generate new event based on the number of identical events. However, Kongsomo teaches a similar method for event management including the claimed steps as follows:

- vii. "if during the specified interval, a predetermined number of identical subsequent events are received, the engine creating and outputting a new event with an attribute that indicates the number of identical subsequent events that were received"
- viii. "inputting the new event into the engine" at Col. 8 lines 5-45;

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- ix. "the engine extracting a second rule to be applied to the new event from a rules database wherein identification information within the second rule identifies the new event" at Col. 8 lines 5-45;
- x. "determining whether the number of identical subsequent events exceed a threshold"
- xi. "creating a threshold event indicating whether the number of identical subsequent events exceeds the threshold"
- xii. "outputting the threshold event to a user" at Col. 8 lines 5-45.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Konsmo with Vijayan's teaching; considering the number of identical event will help reducing the number of output messages and reduce workload and false alarming to the system.

Vijayan and Konsmo do not explicitly teach the step of "converting the event into a standard format". However, Marwaha teaches a similar system for managing events in a distribute system (See Fig. 3.) Marwaha recognizes the problem of having multiple event formats as "it becomes more and more difficult for the operators to manage, process and handle alerts" at [0041] and suggests the step of converting events into a standard format at page 6, [0061]. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to combine Marwaha with Vijayan and Konsmo's teachings to make it easier to manage, process and handle different format events as suggested by Marwaha.

As per claim 2, Vijayan, Konsmo and Marwaha teach the method as claimed in claim 1 discussed above. Vijayan also teaches: "the first event and the subsequent event originate from any of a set of a network, an application, an operating system residing on the distributed computing system, and hardware" at Col. 4 lines 43-49.

As per claim 5, Vijayan and Marwaha teach the method as claimed in claim 1 discussed above. Vijayan also teaches: "wherein the identification information includes: i. an attribute; ii. an operator; and iii. a value" at Fig. 7.

As per claim 6, Vijayan and Marwaha teach the method as claimed in claim 5 discussed above. Vijayan also teaches: "wherein the specified interval is time" at Col. 5 lines 14-30.

Response to Arguments

5. Applicant's arguments filed 11/9/2006 have been fully considered but they are not persuasive. The examiner respectfully traverses applicant's arguments.

6. Applicant's arguments with respect to claims **1-2, 5-6, and 23** have been considered but are moot in view of the new ground(s) of rejection.

7. Regarding claims 7, 14 and 21, applicant argued that Vijayan does not disclose "receiving at least one event specifying a type of server (database, portal service) failure, correlating the server failure event with a subsequent event and outputting to the user either a server restoration or server failure event". On the contrary, Vijayan clearly teaches the above limitation at Col. 5 lines 1-45. Specifically, Vijayan teaches the steps

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of receiving "Node Down" or "Interface Down" events (i.e., "at least one event specifying a type of server failure"), Vijayan then teaches the cool off time out to wait for subsequent events. If a good event is received which indicates "a server restoration", otherwise, after the expiration of the cool off time, outputting the user the failure event.

8. Regarding claim 24, applicant argued that Vijayan does not teach or suggest "a system for managing received events having a central event system, including a rule database containing actions for filtering, correlating or consolidating one or more received events". On the contrary, as shown the rejection above. Vijayan and Marwaha, as combined teaches each and every limitations of claim 24, including the above limitation.

Conclusion

9. The prior art made of record, listed on form PTO-892, and not relied upon, if any, is considered pertinent to applicant's disclosure.

If a reference indicated as being mailed on PTO-FORM 892 has not been enclosed in this action, please contact Lisa Craney whose telephone number is **(571) 272-3574** for faster service.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh B. Pham whose telephone number is (571) 272-4116. The examiner can normally be reached on Monday through Friday 7:30am to 4:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hosain Alam can be reached on (571) 272-3978. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Khanh B. Pham
Primary Examiner
Art Unit 2166



February 2, 2007